Overview

HPE SimpliVity 380



For IT leaders struggling to achieve the agility and economics of the cloud, with the control and governance of on-premises IT, HPE SimpliVity 380 delivers a powerhouse hyperconverged solution—running some of the world's most efficient and resilient data centers. A market and customer satisfaction leader, the solution dramatically simplifies IT by combining all infrastructure and advanced data services for virtualized workloads onto the bestselling server platform in the market.

HPE SimpliVity 380, available on HPE ProLiant DL380 Gen9 Servers, is a compact, scalable 2U rack-mounted building block that delivers server, storage, and storage networking services. It also delivers a complete set of advanced functionality that enables dramatic improvements to the efficiency, management, protection, and performance of virtualized workloads—at a fraction of the cost and complexity of today's traditional infrastructure stack.

What's New

- Factory integrated hyperconverged solution direct from HPE
- Featuring HPE OmniStack software running on HPE DL380 Servers
- Intel® Xeon® E5-2600 v4 Processor (Broadwell) support
- All Flash Storage

Overview

HPE SimpliVity 380 Product Information

Scalable and Configurable

- Expandable in 1 node increments up to 32 total nodes
- Simplified, configurable appliance with multiple storage choice points
 - Small All SSD: Small Business and remote offices
 - Medium All SDD: Mid-Size Enterprise Data Centers
 - Large All SSD: Large Enterprise Data Centers
- Processor Choice of Intel Xeon E5 v4 processors
- Memory 256GB to 1536GB (Per Node)
- Network 10Gb, 1Gb
- Power Redundancy
- Virtualization Software and Licensing
- All in a compact 2U form factor

NOTE: It is strongly recommended that an HPE SimpliVity 380 cluster have a minimum of two nodes to realize the full benefit of the high availability hyperconverged solution

Software Features

- VMware vSphere
- HPE SimpliVity management plugin for VMware vCenter

Hardware Availability Features

- Cluster expansion without downtime
- Hot-pluggable SSD
- Redundant power supplies
- Integrated storage controller with battery-backed cache
- HPE ProLiant Integrated Lights-Out Advanced (iLO) 4 Remote Management

Services

- HPE Insight Remote Support delivers 24x7 secure remote support
- 3-year solution support included for best support experience

NOTE: For the best support experience, HPE Pointnext Installation Services and 24x7x365 support recommended.

Overview

	HPE SimpliVity 380 At-a-Glance
Node Size	2U
Processors	2x Intel Xeon E5 processors per node, 8 to 22 cores selectable
Memory	256GB to 1536GB per node selectable
Storage	Three selectable configurations of all flash storage Small - 5 x 1.92TB SSD Kit Medium - 9 x 1.92TB SSD Kit Large - 12 x 1.92TB SSD Kit
Network Ports	Ethernet 10Gb 2-port
Power Supplies	1400W FS Hot Plug Power Supply Kit 800W FS Hot Plug Power Supply Kit 800W FS -48VDC Hot Plug Power Supply Kit (Telecom) 800W FS Hot Plug Power Supply Kit
Hardware Warranty¹	Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response
Hardware Support	3-year HPE SimpliVity 380 solution support (required)

NOTE¹: Warranty for SSDs is subject to maximum usage limitations. Maximum usage limit is the maximum amount of data that can be written to the drive. Drives that have reached this limit will not be eligible for

Features and Benefits

Fully integrated system

Combines x86 resources, storage, and storage networking in a single hyperconverged system. Simplifies management and delivers great cost efficiency and agility with increased visibility and control.

Peak and predictable performance

The all-flash solution provides predictable and linear performance at near-wire speeds with reduced latency. Hardware-assisted inline deduplication, compression, and optimization helps minimize I/O and network traffic, improving performance while delivering great storage and bandwidth efficiency.

Scale in and scale out

Easily expand or shrink configurations as your needs change. Each node supports a large number of fully protected virtual machines (VMs), with the networked collection of nodes at both local and remote sites managed as a single entity.

VM centricity and mobility

Enables all actions, policies, and management at the VM level. Global unified management and integration with established administrative systems streamline operations and improve IT agility.

Dramatic TCO reduction

Drastically reduce the need to purchase multiple discrete components, optimize storage capacity with guaranteed 10:1 data efficiency, and prevent over-provisioning for performance and capacity with on-demand expansion.

Overview

Software Overview

Pre-integrated software

• Virtualization HPE SimpliVity Startup Wizard

Virtualization Platform Software and Licenses

NOTE: The HPE SimpliVity 380 supports VMware vCenter 6.0 and 6.5.

- VMware vSphere installation media is required to complete the installation and is available from HPE when ordering the HPE SimpliVity 380
- Valid licenses for the following VMware software components are required and is available from HPE when ordering the HPE SimpliVity 380
 - (2) VMware vSphere licenses per Node
 - (1) VMware vCenter license

NOTE: HPE SimpliVity 380 for VMware vSphere requires valid VMware vSphere, and vCenter licenses. VMware licenses can only be removed from the order if it is confirmed that the end-customer has a valid licenses in place (Enterprise License Agreement (ELA), vCloud Air Partner or unused Enterprise Purchasing Program tokens).

Purchasing VMware licenses from Hewlett Packard Enterprise allows Hewlett Packard Enterprise to be the single point of contact for the entire solution inclusive of the virtualization software and is recommended.

Management

- VMware vCenter
- HPE SimpliVity management plugin for VMware vCenter

NOTE: The HPE SimpliVity 380 supports VMware vCenter 6.0 and 6.5.

How to Order

Overview

Step 1: Start with the base node

Step 2: Select the hardware options to add to the base node: processors, memory, storage, networking, power, HW options

Step 3: Select the software options to add to the node: HPE OmniStack, iLO Advanced, VMware vSphere

Step 4: Select service and support

Step 1: Base Node

Action	Description	Part #
Select the base node	HPE SimpliVity 380 Gen9 Node	Q5V84A
Required node components	HPE SimpliVity 380 480GB Boot Storage Kit	Q5V85A
included automatically by the	HPE DL380 Gen9 2SFF Front SASx4 Cable Kit	783008-B21
configurator	HPE 12Gb SAS Expander Card with Cables for DL380 Gen9	727250-B21
	HPE H240ar 12Gb 2-ports Int FIO Smart Host Bus Adapter	749976-B21
	HPE DL380 Gen9 2SFF Front/Rear SAS/SATA Kit	724864-B21
	HPE 32GB microSD Mainstream Flash Media Kit	700139-B21
	HPE SimpliVity Accelerator Card	included in base
	LSI Storage controller	included in base

Step 2: Hardware Configuration

Processors

Action	Description	Cores	Speed	Power	Part #
Select CPUs for the node	HPE DL380 Gen9 E5-2620v4	8	2.1 Ghz	85W	817927-L21
					817927-B21
Both CPUs are required and	HPE DL380 Gen9 E5-2667v4	8	3.2 Ghz	135W	817947-L21
will be included by the					817947-B21
configurator	HPE DL380 Gen9 E5-2640v4	10	2.4 Ghz	90W	817937-L21
					817937-B21
	HPE DL380 Gen9 E5-2650v4	12	2.2 Ghz	105W	817943-L21
					817943-B21
	HPE DL380 Gen9 E5-2680v4	14	2.4Ghz	120W	817951-L21
					817951-B21
	HPE DL380 Gen9 E5-2690v4	14	2.6Ghz	135W	817959-L21
					817959-B21
	HPE DL380 Gen9 E5-2683v4	16	2.1Ghz	120W	817953-L21
					817953-B21
	HPE DL380 Gen9 ES-2697Av4	16	2.6Ghz	145W	817955-L21
					817955-B21
	HPE DL380 Gen9 E5-2697v4	18	2.3Ghz	145W	817963-L21
					817963-B21
	HPE DL380 Gen9 E5-2698v4	20	2.2Ghz	135W	817965-L21
					817965-B21
	HPE DL380 Gen9 E5-2699v4	22	2.2Ghz	145W	817967-L21
					817967-B21

How to Order

Action	Total Capacity	Module Type	DIMM Size	Qty	Part #
Select a memory capacity for	256 GB	R-DIMMS	16GB DIMM	16	836220-B21
the node	256 GB	R-DIMMS	32GB DIMM	8	805351-B21
	384 GB	R-DIMMS	16GB DIMM	24	836220-B21
The appropriate memory and	384 GB	R-DIMMS	32GB DIMM	8	836220-B21
quantity will be included by			16GB DIMM	8	805351-B21
the configurator	512 GB	R-DIMMS	32GB DIMM	16	805351-B21
	512 GB	LR-DIMMS	64GB DIMM	8	805358-B21
	768 GB	R-DIMMS	32GB DIMM	24	805351-B21
	1024 GB	LR-DIMMS	64GB DIMM	16	805358-B21
	1536 GB	LR-DIMMS	64GB DIMM	24	805358-B21

Storage

Effective capacity varies by environment, and is a function of realized deduplication and compression rates. The capacities in this table offer a conservative range based on compression and deduplication rates found in standard, primary storage use cases.

Action	Description	Effective Capacity	Part #
Select one of three storage	HPE SimpliVity 380 5x1.92TB SSD Kit	6-12 TB	Q5V86A
configurations for the node	HPE SimpliVity 380 9x1.92TB SSD Kit	12-25 TB	Q5V87A
	HPE SimpliVity 380 12x1.92TB SSD Kit	20-40 TB	Q5V88A

Networking		
Action	Description	Part #
A 10GbE FlexLOM is required.	HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter	665243-B21
This is in addition to the standard 4 port 1GbE LOM included in the base node	HPE Ethernet 10Gb 2-port 561FLR-T (RJ45) Adapter	700699-B21

PCI Adapter		
Action	Description	Part #
One optional PCI adapter can	HPE Ethernet 10Gb 2-port 560SFP+ Adapter	665249-B21
be added to the system	HPE Ethernet 10Gb 2-port 561T (RJ45) Adapter	716591-B21
	HPE Ethernet 1Gb 2-port 361T Adapter	652497-B21
	HPE Ethernet 1Gb 4-port 366T Adapter	811546-B21

Power Supplies		
Action	Description	Part #
Two power supplies are	HPE 1400W FS Plat Pl Ht Plg Pwr Spply Kit	720620-B21
required.	HPE 800W FS Plat Ht Plg Pwr Supply Kit	720479-B21
	HPE 800W FS -48VDC Ht Plg Pwr Supply Kit (Telecom)	720480-B21
	HPE 800W FS Ti Ht Plg Pwr Supply Kit	720482-B21
	HPE 800W FS Univrsal Ht Plg Pwr Spply Kit	720484-B21

How to Order

NOTE: The power supply requirement can vary based configuration and environment. Please refer to HPE Power Advisor for proper power sizing

NOTE: All configured nodes ship with a standard 6-foot IEC C-13/C-14 jumper cord (A0K02A). This jumper cord is also included with each standard AC power supply option kit. If a different power cord is required, please check the ProLiant Power Cables web page. https://h20195.www2.hpe.com/v2/getpdf.aspx/4AA6-6836ENW.pdf

Related Options

Action	Description	Part #
Additional hardware options	HPE X240 10G SFP+ SFP+ 1.2m DAC Cable	JD096C
are available	HPE X240 10G SFP+ SFP+ 3m DAC Cable	JD097C
	HPE X240 10G SFP+ SFP+ 5m DAC Cable	JG081C
	HPE X240 10G SFP+ SFP+ 7m DAC Cable	JC784C
	HPE LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack FO Cable	AJ834A
	HPE LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack FO Cable	AJ835A
	HPE LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack FO Cable	AJ836A
	HPE LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack FO Cable	AJ837A
	HPE BladeSystem c-Class 10Gb SFP+ SR Transceiver	455883-B21
	HPE BladeSystem c-Class 10Gb SFP+ LR Transceiver	455886-B21
	HPE BladeSystem c-Class 1Gb SFP+ SX Transceiver	453151-B21
	HPE 0.9m, Blue, Cat6 STP Data Cable	AF594A
	HPE 3m, Blue, Cat6 STP Data Cable	AF595A
	HPE 10m, Blue, Cat6 STP Data Cable	AF596A
	HPE Ethernet 4ft CAT5 RJ45 M/M Cable	C7533A
	HPE Ethernet 7ft CAT5e RJ45 M/M Cable	C7535A
	HPE Ethernet 14ft CAT5e RJ45 M/M Cable	C7536A
	HPE Ethernet 25ft CAT5e RJ45 M/M Cable	C7537A
	HP 2U SFF Easy Install Rail Kit	733660-B21
	HP 2U Cable Management Arm for Easy Install Rail Kit	733664-B21
	HP DL380 Gen9 Systems Insight Display Kit	768900-B21
	HP 2U Security Bezel Kit	666988-B21
	HPE Trusted Platform Module 1.2 Kit	488069-B21

How to Order

Step 3: Software Configuration

HPE Omnistack Software

Action	Description	Part #
Based on the hardware	HPE OmniStack 8c 2P 5x1.92TB SSD SW	Q5V89A
configurations in step 1 & 2	HPE OmniStack 10c 2P 5x1.92TB SSD SW	Q5V90A
the appropriate software will	HPE OmniStack 12c 2P 5x1.92TB SSD SW	Q5V91A
be included by the	HPE OmniStack 14c 2P 5x1.92TB SSD SW	Q5V92A
configurator.	HPE OmniStack 16c 2P 5x1.92TB SSD SW	Q5V93A
	HPE OmniStack 18c 2P 5x1.92TB SSD SW	Q5V94A
The required software is	HPE OmniStack 20c 2P 5x1.92TB SSD SW	Q5V95A
determined by CPU and	HPE OmniStack 22c 2P 5x1.92TB SSD SW	Q5V96A
storage configuration.	HPE OmniStack 8c 2P 9x1.92TB SSD SW	Q5V97A
	HPE OmniStack 10c 2P 9x1.92TB SSD SW	Q5V98A
	HPE OmniStack 12c 2P 9x1.92TB SSD SW	Q5V99A
	HPE OmniStack 14c 2P 9x1.92TB SSD SW	Q5W00A
	HPE OmniStack 16c 2P 9x1.92TB SSD SW	Q5W01A
	HPE OmniStack 18c 2P 9x1.92TB SSD SW	Q5W02A
	HPE OmniStack 20c 2P 9x1.92TB SSD SW	Q5W03A
	HPE OmniStack 22c 2P 9x1.92TB SSD SW	Q5W04A
	HPE OmniStack 8c 2P 12x1.92TB SSD SW	Q5W05A
	HPE OmniStack 10c 2P 12x1.92TB SSD SW	Q5W06A
	HPE OmniStack 12c 2P 12x1.92TB SSD SW	Q5W07A
	HPE OmniStack 14c 2P 12x1.92TB SSD SW	Q5W08A
	HPE OmniStack 16c 2P 12x1.92TB SSD SW	Q5W09A
	HPE OmniStack 18c 2P 12x1.92TB SSD SW	Q5W10A
	HPE OmniStack 20c 2P 12x1.92TB SSD SW	Q5W11A
	HPE OmniStack 22c 2P 12x1.92TB SSD SW	Q5W12A

VMware vSphere Software

NOTE: The HPE SimpliVity 380 supports VMware vCenter 6.0 and 6.5.

Action	Description	Part #
A valid VMware vSphere	VMware vSphere Std 1P 3yr SW	BD711A
license is required for each	VMware vSphere Std 1P 3yr E-LTU	BD711AAE
CPU to complete deployment.	VMware vSphere EntPlus 1P 3yr SW	BD715A
	VMware vSphere EntPlus 1P 3yr E-LTU	BD715AAE
If an order is placed without	VMware vSphere ROBO Std 25VM 3yr E-LTU	P9A82AAE
VMware licenses, the user	VMware vSphere ROBO Adv 25VM 3yr E-LTU	P9A85AAE
agrees to supply the	VMware vSphere Std 1P 5yr SW	BD512A
necessary license.	VMware vSphere Std 1P 5yr E-LTU	BD512AAE
	VMware vSphere EntPlus 1P 5yr SW	BD514A
	VMware vSphere EntPlus 1P 5yr E-LTU	BD514AAE
	VMware vSphere ROBO Std 25VM 5yr E-LTU	P9A83AAE
	VMware vSphere ROBO Adv 25VM 5yr E-LTU	P9A86AAE

NOTE: HPE SimpliVity 380 for VMware vSphere requires valid VMware vSphere, and vCenter licenses. VMware licenses can only be removed from the order if it is confirmed that the end-customer has a valid licenses in place (Enterprise License Agreement (ELA), vCloud Air Partner or unused Enterprise Purchasing Program tokens).

How to Order

Purchasing VMware licenses from Hewlett Packard Enterprise allows Hewlett Packard Enterprise to be the single point of contact for the entire solution inclusive of the virtualization software and is recommended. When the VMware license is not included on the order the solution level support experience is impacted.

HPE Integrated Lights Out Advanced Software (iLO Advanced)

Action	Description	Part #
The HPE iLO Advanced		
license is required	HPE iLO Adv 1 Server License with 3-year 24x7 Technical Support	BD505A

Step 4: Service and Support

Services for customers purchasing from Hewlett Packard Enterprise or an enterprise reseller are quoted using Hewlett Packard Enterprise order configuration tools.

Technology Services for increased uptime, productivity and ROI

At HPE, our priority is to maximize your workload uptime, avoiding problems before they occur. As the experts for the HPE SimpliVity 380, HPE Pointnext support will be your 24x7x 365 single point-of-contact for all of your support needs. This means you can spend more time developing apps and adding value to the business rather than maintaining your infrastructure.

If there is a potential risk in your infrastructure, our remote support technology will proactively notify HPE and initiate the resolution process. If you are experiencing any issue with your solution you will have immediate access to our team of solution experts, whose first priority is to ensure your workloads are up and running, and then immediately start diagnosing the failure.

HPE SimpliVity 380 is supported by the power of HPE, in 30+ different languages, with local presence across 140 countries.

Please consult your HPE Sales Representative for any additional questions and support options.

Installation and Startup Services

Required. Please contact your HPE Sales Representative for more information.

NOTE: For more information on Technology Services please visit: https://www.hpe.com/us/en/services.html

Warranty

This product is covered by a global limited warranty and supported by Hewlett Packard Enterprise Pointnext and a worldwide network of Hewlett Packard Enterprise Authorized Channel Partners resellers. Hardware diagnostic support and repair is available for three years from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Enhancements to warranty services are available through HPE Care Pack services or customized service agreements. Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

This hardware warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have Hewlett Packard Enterprise replace Optional CSR parts at no charge.

Technical Specifications

End-of-life Management and Recycling

Hewlett-Packard offers end-of-life Hewlett Packard Enterprise product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: http://www.hp.com/go/green. To recycle your product, please go to: http://www.hp.com/go/green or contact your nearest Hewlett Packard Enterprise sales office. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard Enterprise web site at: http://www.hp.com/go/green. These instructions may be used by recyclers and other WEEE treatment facilities as well as Hewlett Packard Enterprise OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.

Physical Dimensions

2U form factor: 3.44 x 26.75 x 17.54 in (8.73 x 67.94 x 44.54 cm)

Weight

Ranges from 24.8 lb (11.7 kg) to 27.7 lb (12.5 kg) depending on hardware configuration

Summary of Changes

Date	Version History	Action	Description of Change
05-Jun-2017	Version 1	New	Initial version



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